

INCORPORATING SPORT EDUCATION ROLES FOR STUDENTS WITH VISUAL IMPAIRMENTS AND BLINDNESS AS PART OF A SPORT CAMP EXPERIENCE

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Abstract

Though much has been written on sport education (SE) as it relates to more traditional invasion games such as basketball, rugby, and ultimate disc, little work has been carried out on its use with disability sport or children with disabilities in general. As such, the purpose of this project was to determine the effect sport education roles had on athletes with visual impairments and blindness during a 3-day goalball experience. Findings suggest that both athletes and their coaches had a deeper understanding and more positive view of sport having participated in these roles.

Keywords: *sport education, disability sport, visual impairment/blindness, instructional models*

Sport Education and Disability

Though much has been written on sport education (SE) as it relates to more traditional invasion games like basketball, rugby, and ultimate disc (Browne, Carlson, & Hastie, 2004; Hastie, 1998a; Schneider & Marriott, 2010), unique areas such as fitness (Beudet, Acquaviva, & Grube, 2004; Hastie, Sluder, Buchanan, & Wadsworth, 2009; Sluder, Buchanan, & Sinelnikov, 2009), dance (Graves & Townsend, 2000; Richardson & Oslin, 2003), bowling (Pritchard & McCollum, 2008), bicycle safety (Sinelnikov, Hastie, Cole, & Schneulle, 2005), and the recently popular *CrossFit* (Sibley, 2012) for example, have also used the approach. However, little work has been carried out on its use with Paralympic sport or with students with disabilities in general. One article in particular explored how students with disabilities engaged with their peers during a sport education experience (Fittipaldi-Wert, Brock, Hastie, Arnold, & Guarino, 2009) and some discussion has surfaced on the use of SE to facilitate disability awareness (Foley, Tindall, Lieberman & Kim, 2007), assessment for students with disabilities (Tindall & Foley, 2011) as well as ways to adapt roles (Pressé, Block, Horton, & Harvey, 2011) within the physical education setting. Yet, to date, nothing of any recent relevance has been

written on utilizing sport education as it involves students with disabilities; specifically, students with visual impairments (VI). In response, the purpose of this project was to determine the effect SE roles had on athletes with VI and blindness during a 3-day goalball experience. Precisely, how these roles were received by the athletes, as well as their coaches, participating in a sports camp was observed.

Sport Education

Sport education is a curriculum model intended to provide authentic and contextualized sport experiences for students during their school physical education experiences through the educational philosophy of “Olympism”; a way of thinking that seeks to integrate academic study, aesthetic education, and moral education all within the physical education setting (Lucas, 1981; Siedentop, 1994; Siedentop, Hastie, & van der Mars, 2011). The main goal of sport education is to help students develop as *competent, literate, and enthusiastic sportspersons* (Siedentop, 1994; Siedentop, Hastie, & van der Mars, 2011). It does this by providing to all students the opportunity to be successful, regardless of their level of motor development (Cho, Richards, Blankenship, Smith, & Templin, 2012), skill level (Clarke & Quill, 2003), tactical awareness (Hastie, 1998a), or gender (Hastie, 1998b).

For students or athletes to become a *competent and literate* sportspersons, they must be able to understand, appreciate, and carry out strategies common during game play as well as recognize and value the specific rules and traditions within the sport or game. Examples of competency in invasion games, for example, may include such things as spatial awareness, defending space, offensive and/or defensive support of teammates, and correct decision making during play; while examples of literacy could include anything from serving as a refereeing (knowing when and how to enforce rules of the game) to identifying the unique aspects of the particular sport (i.e., the differences between invasion games net/wall games, striking/fielding games, and target games) (Mitchell, Oslin, & Griffin, 2013). Additionally, as a literate sportsperson, the student learns to tell between acceptable

and unacceptable sport behaviors while at the same time understanding the importance of effective leadership and working with teammates to solve problems (either related to game performance, to other player behaviors, or to both). It is this part of the SE process that encourages students to identify ways to modify a sport to ensure everyone is included as part of the team. In short, players must become educated on the various aspects of “game play” by developing both psychomotor (competent) and cognitive (literate) skills specific to certain sports and physical activities.

Due to the fact that some roles within SE are sedentary in nature, the authors recommend rotation of roles often to increase activity time. Given that goalball halves are 10 minutes in length, a natural break for rotation occurs often. Additionally, when possible allow students to stand, ride an excise bike, or do wall sits while performing such roles as scorekeeper or manager.

Lastly, to be an *enthusiastic* sportsperson, one is encouraged to voluntarily participate, defend, and advance the notion of sport at all levels whether it is community-based youth sport and physical activity programs, high school sport programs and clubs, or professional games/competitions. The underlying goal is to *think critically* about sport and *act responsibly* to create a more fair and unprejudiced society. By doing so, students develop the capacity to make reasoned decisions about sport issues while embracing the true spirit of sport.

Given the benefits of SE and its “Olympism” approach within the physical education setting, a logical step would be to apply some of these same concepts within the area of disability sport as a means to promote the Paralympic Games and disability sport in general. According to Hunter (2014), community programs and sport camps associated with the Paralympic movement are essential for students with disabilities as they provide recreational or competitive opportunities for these individuals who wish to participate in a sport or leisure activity. These opportunities provide the stepping stones for individuals who wish to possibly compete at a Paralympic level, while at the same time supporting those who just want to be more active. In either case, the use of roles contained within SE can help individuals with disabilities learn life skills and improve their social skills while also promoting sport participation. Equally important, such an approach has the potential to increase both athletes’ motivation and level of engagement thus providing students with disabilities a sport experience that is more relevant to their interests (Tepfer & Lieberman, 2012). As a first step to understanding their impact, the roles contained with SE as they affect children with VI and blindness will be examined.

Planning

Thirteen athletes (11-15 years of age) and 13 camp counselors or “coaches” (18-50 years of age), along with a group leader and two game specialists, took part in the project. Athletes were individuals participating in a 1-week developmental sports camp for children and teens who are visually impaired, blind, and deafblind. Coaches, group leaders, and game specialists were comprised of physical education and special education undergraduate and graduate students.

Goalball was chosen as the focus of this project because it is considered to be a straightforward sport, one that would be easy for the athletes to assume roles (i.e., planning of practice sessions, opportunities to serve as referee and scorekeeper, etc.) and for coaches/game specialists to assist where necessary. Goalball is a Paralympic sport played with an audible ball on a court similar in size to volleyball. It is a 3v3 game where the object is to roll the ball past defenders in order to score a point. Given all six players are blindfolded; there must be absolute silence during gameplay. For more specific information on the rules and regulations of goalball please see USABA.org.

Prior to the beginning of camp, the group leader and coaches, as well as the two sport specialists for goalball, were provided with a brief, 1-day informational session as part of their in-service training on both the overall project goals and the specific elements of each SE role. Yet, due to time restrictions, this instructional session only lasted for one hour. As would soon be realized, the element of time proved to be a factor throughout much of the project. With so many different activities offered at camp, implementing the SE roles became a bit challenging as the goalball “season” consisted of only two practice sessions and one game-day session. This gave athletes little time to learn and implement each role. According to Siedentop et al. (2011), the recommended length of an SE unit is between nine sessions (elementary) up to 20 sessions (high school).



Goalball gameplay

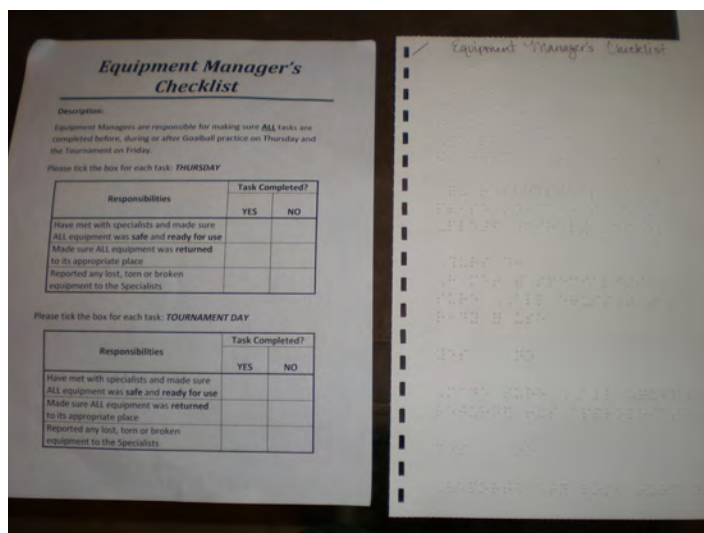
Implementation

SE Roles and Materials

For this project, eight basic roles were implemented consisting of one general role (player) and seven specialist roles (captain, equipment manager, coach, head referee, head scorekeeper, team publicist, and team nutritionist); two of which also included sub-roles that allowed the athletes to participate on a rotational basis (game referee and scorekeeper). On the first day of camp, roles were individually posted in both large print and braille in the general meeting/cafeteria area so athletes and their coaches could move at their leisure around the space and read the specific responsibilities for each (see Table 1).

Table 1
Athlete Roles and Responsibilities

ROLE (# of team members)	RESPONSIBILITIES
PLAYER (ALL)	As a player you should: <ul style="list-style-type: none"> be positive and have fun encourage and support your teammates practice and play hard but always fairly respect your teammates, opponents, and the referees know the rules for each sport we play
CAPTAIN (1-2)	As a team captain you should: <ul style="list-style-type: none"> be a leader during training and game play treat all your teammates fairly be willing to assist the coach and specialist represent your team when meeting game officials help and encourage all your teammates
EQUIPMENT MANAGER (1-2)	As an equipment manager you should: <ul style="list-style-type: none"> make sure equipment is ready for play encourage peers to use equipment appropriately report any damaged or lost equipment
COACH (1-2)	As a coach you should: <ul style="list-style-type: none"> with specialist organise team practices help all your players to play their best organise your players before each competition give all teammates equal time to play support, encourage and motivate your teammates
HEAD REFEREE (1-2) REFEREE (ALL – rotates)	As a head referee/referee you should: <ul style="list-style-type: none"> ensure you and other team members know the rules be firm, consistent, and fair to both teams when officiating be able to explain your “calls” to players and scorekeepers ensure that everyone is playing fairly concentrate on the game when refereeing do your best
HEAD SCOREKEEPER (1-2) SCOREKEEPER (ALL – rotates)	As a head scorekeeper/scorekeeper, you should; <ul style="list-style-type: none"> prepare and have teammates use the correct score sheet make sure teammates concentrate on the game, know the game’s scoring system and keep an accurate record of scoring, assists, and defensive blocks collect results and give to the team statistician or game specialist immediately after the match
TEAM PUBLICIST (1-2)	As a publicist you should: <ul style="list-style-type: none"> promote the team’s presence through “game notes” and/or a “team profile” create and post team bios so others can “get to know” your teammates serve as an “announcer” for games
TEAM NUTRITIONIST (1-2)	As a nutritionist you should: <ul style="list-style-type: none"> make sure all members of your team are hydrating throughout the day make sure you know where to find water in or near the gymnasium make sure your teammates have at least one piece of fruit before and after games



Materials in both visual and braille formats

Because decisions on who would fill each role had to be decided upon quickly, coaches were very helpful during this time explaining the roles to their athletes and answering questions where necessary. This was an important part of the process as according to Siedentop, Hastie, and van der Mars (2011) when first introducing the notion of roles to students (or athletes in this case), the number and depth should be taken into consideration.

From a physical education perspective, novice teachers who implement the SE approach for the first time tend to offer a fuller version of it; designing a 6-8 week unit consisting of many roles throughout the season. This allows the students to not only learn the nuances contained within the role but to improve over time in fulfilling all the duties attached to said role. For example, asking students to referee a game of basketball, which can become high paced and contains many rules, could be a daunting task for students who have had little time to practice such skills. Given the significantly short timeframe for this project (one week containing three sessions), having too many roles with elaborate responsibilities would not have been conducive to a positive sport experience for the athletes and their coaches. As such, in order to help them as they worked together during the goalball portion of camp all of the roles were simplified and shared amongst the athletes.

The publicist and one of the project leaders also made player profiles and posted each player’s photo and relevant information on the wall of the gym. Players appeared to really enjoy seeing (or have read to them) their athlete profile containing both the photo and relevant information such as height, weight, years of playing goalball, and positions on the wall. This especially helped the players to learn more about their fellow team members.

For the specialist roles (i.e., captain, coach, equipment manager, nutritionist, publicist), a checklist of specific duties to be completed was provided to the athletes (see Figures 1-5).



Player and coach biographies from the team publicists



Player and coach biographies from the team publicists



Coaches assisting athletes in understanding the responsibilities for each role

This included the roles, their responsibilities, as well as role checklists, game results, and any messages from a role holder to their team (for example, the nutritionist reminding teammates to hydrate before, during, and after practice). These materials were posted on the team notice board located in the hallway that connects the dormitory to the caf-

eteria. Though the group only participated in goalball on Tuesday, Thursday, and Friday athletes were asked to check the board daily to see if new information or results had been posted.

Evaluation of the Experience

Athlete and Coach Responses

At the end of the 1-week camp, athletes and coaches were asked to respond to their thoughts and feelings about the experience. Overall, the athletes and coaches were very positive toward including SE roles within the sports camp. For the athletes, all enjoyed participating in their chosen roles and found them easy. Having specific roles allowed them to interact and “get to know each other” outside of goalball (e.g., publicist interviewing each team member). Likewise, athletes during the discussion expressed how having roles made the game more relevant, even for those who played before. Specifically, they felt it helped to be a coach, captain, or referee because “you have to know the rules” and “you have to see everything if you are helping your teammates.” However, having the roles for only one sport would not be desired. Athletes felt the experience was too short and should be continued throughout other sports and camp activities (e.g., beep baseball, biking, or track & field, but not others like gymnastics).

From the coaches’ perspective, all in the group noticed a higher level of engagement from their athletes in goalball compared to other sports and activities. Specifically, the coaches noted how their athletes were taking more responsibility in completing the tasks required for each role (i.e., the coach planning a session with the game specialist, the publicist gathering information for athlete/coach biographies, and the nutritionist checking to see if teammates had water during activity). According to the coaches, the athletes had something to do while they were not playing which seemed to make them feel more important and engaged. Other observations from the coaches were similar to those expressed by the athletes. Exactly, coaches sensed the roles made the game more relevant for both beginners and advanced players as time was not wasted on learning previously taught skills. Additionally, coaches also felt the roles should be used or carried over into other sports or physical activities. However, the coaches expressed the need for more time in learning about the roles and how they could be introduced during in-service training prior to the beginning of camp. For this project, the roles were only introduced on one day for approximately one hour. Having more time for coaches to engage and understand how the SE roles could be utilized across the entire weeklong camp (and not for just one sport/activity) would be something to explore further.

Implications

The purpose of this project was to determine the effectiveness of implementing roles for students with visual impairments and blindness as they participated in a brief 3-day goalball experience as part of a 1-week disability sport camp. Given the feedback from both the athletes and their coaches,

Team Coach Checklist

Description:
Team coaches are responsible for making sure ALL tasks are completed before, during or after goalball practice on Thursday and the tournament on Friday.

Please tick the box for each task: THURSDAY

Responsibilities	Task Completed?	
	Yes	No
Met with Specialists to decide the practice plan		
Helped to lead the group warm-up with Specialists		
Made sure everyone had the chance to play fairly and equally		
Supported, motivated, and encouraged ALL teammates		

Please tick the box for each task: TOURNAMENT DAY

Responsibilities	Task Completed?	
	Yes	No
Met with Specialists to decide the practice plan		
Helped to lead the group warm-up with Specialists		
Made sure everyone had the chance to play fairly and equally		
Supported, motivated, and encouraged ALL teammates		

Equipment Manager Checklist

Description:
Equipment managers are responsible for making sure ALL tasks are completed before, during or after goalball practice on Thursday and the tournament on Friday.

Please tick the box for each task: THURSDAY

Responsibilities	Task Completed?	
	Yes	No
Have met with specialists and made sure ALL equipment was safe and ready for use		
Made sure ALL equipment was returned to its appropriate place		
Reported any lost, torn or broken equipment to the Specialists		

Please tick the box for each task: TOURNAMENT DAY

Responsibilities	Task Completed?	
	Yes	No
Have met with specialists and made sure ALL equipment was safe and ready for use		
Made sure ALL equipment was returned to its appropriate place		
Reported any lost, torn or broken equipment to the Specialists		

Team Nutritionist Checklist

Description:
Team nutritionists are responsible for making sure ALL tasks are completed before, during and after goalball practice on Thursday and the tournament on Friday.

Please tick the box for each task: THURSDAY

Responsibilities	Task Completed?	
	Yes	No
Has made sure each teammate has had at least one piece of fruit before and after practice		
Has checked to see if everyone has brought their water bottle		
Knows where water is available (in or near the gym) in case teammates forget their water bottles		

Please tick the box for each task: TOURNAMENT DAY

Responsibilities	Task Completed?	
	Yes	No
Has made sure each teammate has had at least one piece of fruit before and after the tournament		
Has checked to see if everyone has brought their water bottle		
Knows where water is available (in or near the gym) in case teammates forget their water bottles		

[illegible]

Vol. 30, No. 3 | 2016 | PALAESTRA 35

- More time can be given for athletes and their coaches to engage with the roles and apply them across more than one sport or activity during camp
- Teachers themselves could participate in a goalball experience in order to understand how to play the game with a visual impairment
- Involve sighted children with blindfolds to make the experience more inclusive
- Invite Paralympic athletes to serve as a role model and add to the excitement of the game
- Utilize *YouTube* videos of elite-level competition described by the teacher or a peer if necessary to provide players with a complete understanding of the performance required during a game

As suggested by Tepfer and Lieberman (2012), when developing a disability sport experience, preparation and communication between colleagues is a must before the experience can take place. In this project, though a brief, 1-hour instructional session transpired with both the coaches and goalball specialists prior to the arrival of athletes a more extensive training session should occur well in advance of the beginning of camp. Doing so will allow all involved to make informed decisions about the sport experiences and materials to be used along with a plan of action and appropriate time table for implementing them across one or more sports or activities.

Conclusion

The concept of implementing the SE model into classes of students with visual impairments is an excellent way to foster inclusion. The natural point in the model where modifications can be infused by students/athletes provides opportunities for audible equipment, guide runners, or changes in rules (i.e., batting off of a tee, or serving closer to the net in volleyball). This collaborative decision making also ensures that peers support the modifications made to the game and feel a sense of ownership over the instructional unit.

In addition, the position of an “announcer,” often a major role in most SE units, helps the students with visual impairments know what is happening during the game naturally. For example during a soccer game the announcer will communicate who has the ball, why the game stopped and who scored each goal. An announcer was not used in the current project as goalball must be a silent sport so players can hear the ball. Instead, coaches whispered what transpired to players who were not involved in the game.

Sport education, whether applied to traditional or Paralympic sports, when implemented methodically and openly is a wonderful approach to foster inclusion for all. Whether in your inclusive or self-contained classes, give it a try!

Selected References

- Beaudet, B., Acquaviva, J., & Grube, D. (2004). Take sport education a step further: Add fitness. *Journal of Physical Education, Recreation and Dance*, 75(9), 39–43, 50.
- Browne, T. B. J., Carlson, T. B., & Hastie, P. A. (2004). A comparison of rugby seasons presented in traditional and sport education formats. *European Physical Education Review*, 10(2), 199–214.

- Cho, O. S., Richards, K. A., Blankenship, B. T., Smith, A. L., & Templin, T. J. (2012). Motor skill development of students enrolled in a sport education volleyball season delivered by in-service physical education teachers. *The Physical Educator*, 69(4), 375–394.
- Clarke, G., & Quill, M. (2003). Researching sport education in action: A case study. *European Physical Education Review*, 9(3), 253–266.
- Fittipaldi-Wert, J., Brock, S. J., Hastie, P. A., Arnold, J. B., & Guarino, A. J. (2009). Effects of a sport education curriculum model on the experiences of students with visual impairments. *Palaestra*, 24(3), 6–10.
- Foley, J. T., Tindall, D. W., Lieberman, L. J., & Kim S. Y. (2007). How to develop disability awareness using the sport education model. *Journal of Physical Education, Recreation and Dance*, 78(9), 32–36.
- Graves, M. A., & Townsend, J. S. (2000). Applying the sport education curriculum model to dance. *Journal of Physical Education, Recreation and Dance*, 71(8), 50–54.
- Hastie, P. A. (1998a). Skill and tactical development during a sport education season. *Research Quarterly for Exercise and Sport*, 69(4), 368–379.
- Hastie, P. A. (1998b). The participation and perceptions of girls during a unit of sport education. *Journal of Teaching in Physical Education*, 17(2), 157–171.
- Hastie, P. A., Sluder, J. B., Buchanan, A. M., & Wadsworth, D. (2009). The impact of an obstacle course sport education season on students' aerobic fitness levels. *Research Quarterly for Exercise and Sport*, 80(4), 788–791.
- Hunter, D. (2014). Community programs, sport clubs, and clinics for adapted sports. *Journal of Physical Education, Recreation and Dance*, 83(3), 25–26.
- Mitchell, S. A., Oslin, J. L., & Griffin, L. L. (2013). *Teaching sport concepts and skills: A tactical games approach for ages 7 to 18* (3rd ed.). Champaign, IL: Human Kinetics.
- Pressé, C., Block, M. E., Horton, M., & Harvey, W. J. (2011). Adapting the sport education model for children with disabilities. *Journal of Physical Education, Recreation and Dance*, 82(3), 32–39.
- Pritchard, T., & McCollum, S. (2008). Bowling for a lifetime using sport education. *Journal of Physical Education, Recreation and Dance*, 79(3), 17–23.
- Richardson, M., & Oslin, J. L. (2003). Creating an authentic dance class using sport education. *Journal of Physical Education, Recreation and Dance*, 74(7), 49–55.
- Schneider, R. C. & Marriott S. T. (2010). Applying the sport education model to basketball. *Journal of Physical Education, Recreation and Dance*, 81(2), 15–17.
- Sibley, B. A. (2012). Using sport education to implement a CrossFit unit. *Journal of Physical Education, Recreation and Dance*, 83(8), 42–48.
- Siedentop, D. (1994). *Sport education: Quality PE through positive sport experiences*. Champaign, IL: Human Kinetics.
- Siedentop, D., Hastie, P. A., & van der Mars, H. (2011). *Complete guide to sport education* (2nd ed.). Champaign, IL: Human Kinetics.
- Sinelnikov, O. A., Hastie, P. A., Cole, A., & Schneulle, D. (2005). Bicycle safety: Sport education style. *Journal of Physical Education, Recreation and Dance*, 76(2), 24–29.
- Sluder, J. B., Buchanan, A. M., & Sinelnikov, O. A. (2009). Using sport education to teach an autonomy-supportive fitness curriculum. *Journal of Physical Education, Recreation and Dance*, 80(5), 20–28.
- Tepfer, A. T. S., & Lieberman, L. J. (2012). Using cross-curricular ideas to infuse Paralympic sport. *Journal of Physical Education, Recreation and Dance*, 83(4), 20–22, 27.
- Tindall, D. & Foley, J. T. (2011). Assessment modifications for students with disabilities in sport education. *Journal of Physical Education, Recreation and Dance*, 82(7), 30–37.

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